



Alcoa

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OFFICIAL COMMENT

MaryAnn Stevens
Rules Development Branch
Office of Legal Counsel
Indiana Department of Environmental Management
100 North Senate Ave.
MC 65-45
Indianapolis, Indiana 46204-2251

Subject: Third Notice of Comment on Antidegradation Rule

Dear Ms. Stevens:

The Indiana Department of Environmental Management ("IDEM") published a third notice draft rule concerning Antidegradation Standards and Implementation Standards (Proposed Rule) on December 9th, 2011 and requested that comments be provided to IDEM by December 31, 2011.

The Proposed Rule contains a number of revisions to the current Indiana water quality standards rules that Alcoa Inc. ("Alcoa") believes will significantly and adversely affect Alcoa's three facilities within the state. Alcoa is very concerned with the Proposed Rule as written because the Proposed Rule will: (1) impose unnecessary and unreasonable burdens and restraints on Alcoa's facilities when making even minor modifications to our operations; (2) decrease operational flexibility; (3) impose significant additional administrative expense and burden in processing more frequent NPDES permit modifications; (4) impose ultimate prohibitions on new and increased discharges; and (5) result in unnecessarily more stringent permit effluent limits.

In short, Alcoa's key concerns are:

1. A clear and concise trigger for the applicability of the antidegradation rule.
2. The variance mechanism should be applied to all variances including but not limited to 316(a), 316(b), and mercury.
3. A cumulative cap that is overly restrictive.

We cannot emphasize enough the adverse impact the Proposed Rule will have on Alcoa's operations within the state. Given the current economic environment, coupled with the exodus of our industrial base to other lower-cost countries, this type of regulation is just another obstacle in our ability to remain globally-competitive.

We appreciate the opportunity to provide these comments and IDEM's considered review of same.

Sincerely

A handwritten signature in dark ink, appearing to read 'Dennis Wene', is written over a large, faint, circular watermark or stamp.

Dennis Wene
Environmental Engineering Superintendent
Alcoa Inc.- Warrick Operations

COMMENTS ON IDEM'S PROPOSED RULES CONCERNING ANTIDEGRADATION STANDARDS

I. INTRODUCTION.

On December 9, 2011, the Indiana Department of Environmental Management ("IDEM") published a third notice draft rule concerning antidegradation standards and implementation procedures ("Proposed Rule"). The notice indicated that comments must be provided to IDEM by December 30, 2011.

Due to the short comment period that is available these comments will focus on 2 areas:

- A. The Antidegradation Trigger
- B. Variances
- C. The Cumulative Cap

II. THE ANTIDEGRADATION TRIGGER

The proposed rule states that a "proposed new or increased loading of a regulated pollutant to surface waters of the state from a deliberate activity" is subject to an antidegradation review. The exception for HQW discusses "processes that are covered by an existing applicable permit" such as operational variability, adding shifts etc. Our concern is that there is too much ambiguity in this area. We feel that the antidegradation trigger should be "for a new or increased permit limit". The reason is that as an industrial facility we often need to modify equipment, make changes, or even add different types of "production lines" to meet changing customer demand. We have a certain supply capacity at the front end of the plant but how we manufacture our aluminum may change.

Example from recent events at our facility: Can sheet in the domestic market is slowly decreasing so we are always looking at opportunities to increase our presence in new products or areas. We had an opportunity to enter a new market, lithographic sheet with our existing product (aluminum sheet) but require a different innovative production line. This new line will have a wastewater stream that will go to our current wastewater treatment plant but we will still have a slightly increased level of aluminum in our discharge. We will still easily meet our current NPDES permit but this activity, depending on "agency interpretation" may be subject to antidegradation review. Remember, we are still well within our permit limits, but we may have more ambiguity in our capital planning process and our ability to meet market demand and possibly miss a business opportunity, again depending on "agency interpretation". There are other new and innovative ideas such as changes within our casting house using new technology etc that also could be interpreted as a "proposed new" activity but we not need a new permit limit, but rather a simple permit modification to state what we are doing and how we are doing it. Another example is in the water treatment chemical additives. Our current NPDES permit has zinc as a monitored effluent parameter. Zinc phosphates are often used as a corrosion inhibitor but under the proposed rule, any changes to the water treatment additive would require some sort

of an antidegradation demonstration even though a small increase would still be within permitted limits.

The issue is the vagueness in which this is written and interpreted could create problems going forward. Without the appropriate trigger, our facility could be placed at a disadvantage with neighboring states who have a antidegradation trigger as previously described:

Ohio – For existing sources, any re-issuance or modification of a national pollutant discharge elimination system permit that, if approved, would result in..The increase in the mass discharge limit attributable to the activity

Kentucky - The activities identified in this subparagraph shall not be subject to the antidegradation implementation procedures ... The renewal of a KPDES permit that does not authorize pollutant loading to the receiving stream in excess of that previously authorized

Illinois - The Agency must assess any proposed increase in pollutant loading that necessitates a new, renewed or modified NPDES permit or any activity requiring a CWA Section 401 certification to determine compliance with this Section.

Iowa - A regulated activity shall not be considered to result in degradation, if:
A permit for an existing facility does not propose less stringent permit limits or increased treatment plant design capacity; or

Antidegradation review can be time-consuming and expensive. Such review also can introduce a substantial element of uncertainty into business planning and prediction as to what the outcome will be. Therefore, the Proposed Rule also should contain (1) an applicability provision that uses a bright line trigger that necessitates a new or modified NPDES permit; and (2) a provision pertaining to the time for IDEM's rejection or approval of exemption applications. Those in the regulated community should be informed as quickly as possible whether IDEM accepts or rejects an exemption application, and need the certainty of knowing that there is a clear time period by which they can expect such a determination.

III. PARTIES WHO HAVE RECEIVED A VARIANCE SHOULD NOT BE REQUIRED TO UNDERGO ANTIDEGRADATION REVIEW.

In addition, the Proposed Rule should be revised to provide that antidegradation review is not required for agency-approved variances. All variance applications must include a review of both the types of technology capable of treating the pollutant of concern and the social and economic costs of installing and operating each type of technology. This review is very similar to the technology review and demonstration of social or economic importance that is required for antidegradation review.

In fact, the United States Environmental Protection Agency ("U.S. EPA") recommends that States use the same process for reviewing social and economic impacts for variances and antidegradation review. See Interim Economic Guidance for Water Quality Standards Workbook, EPA 823/B-95-002 (March 1, 1995). Thus, if IDEM has granted a variance to a discharger, it makes sense that the discharger should not also need to complete an

antidegradation demonstration. A CWA § 316(a) demonstration affirmatively satisfies antidegradation requirements; thus, no additional review beyond the demonstration that the party already has obtained the variance should be required.

IV. SPECIFIC COMMENTS ON PROPOSED RULE'S DEMINIMIS/CUMULATIVE CAP PROVISIONS.

The Proposed Rule includes de minimis/cumulative cap provisions for high quality waters that are significantly different and greatly more stringent than from the current provisions in the implementation procedures for the Great Lakes system, 327 IAC 5-2-11.3 ("current rule"). The current rule defines the de minimis/cumulative cap based upon unused loading capacity and total loading capacity.

Specifically, under the current rule if as a result of a deliberate activity, a discharger requests a new permit limit or modified permit limit, and the increased limit (as mass) is less than 10 percent of the unused loading capacity and at least 10 percent of the total loading capacity ("TLC") remains unused after the increase, then the increase is considered a de minimis lowering of water quality. Thus, the activity and modified or new permit limit is not subject to the antidegradation demonstration requirements.

The current rule establishes a clear threshold based on the capacity that, cumulatively, ever could be allocated to effluent mass increases as 10 percent of TLC has to remain unused. That is, as multiple requests or multiple dischargers request small increases to discharge limits, the cumulative cap is:

$$90\% \text{ TLC} - \text{Background Level} = \text{Cumulative Effluent Cap}$$

As the TLC is based upon water quality criterion and the applicable stream design flow, the mass to remain unused is constant unless effluent load or background load changes dramatically.

In contrast to the current rule, the Proposed Rule defines the de minimis/cumulative cap based on only unused loading capacity. As in the current rule, for high quality waters the de minimis increase to a limit (or to a new limit) has to be less than or equal to 10 percent of the existing unused loading capacity, determined at the time of the specific proposed new or increased loading of the pollutant of concern. However, the "Benchmark of 90% of unused loading capacity is too restrictive.

IDEM has not presented data or information to show that the current de minimis/cumulative cap provisions are not satisfactory for managing antidegradation standard requirements with respect to minor increases to permit limits. In fact, the application of the cumulative cap and the definition of that cap in the current rule is appropriate and justifiable.

The de minimis allowance of 10 percent of unused loading capacity should be established as the default allowance, and the Proposed Rule should clarify that simple loading capacity calculations will be sufficient to demonstrate that a discharger qualifies under the de minimis provisions.

This is problematic especially for metals in receiving streams that have elevated levels of total suspended solids. The current test methods used for detection of metals often involves total

metals and the lab method requiring acid digestion and then metal extraction which overstates metal concentrations significantly. These total suspended solids (dirt particles) have trace metals that are bound in the particle and are not biologically available. In fact data that the agency would use to make a determination would suggest that the metal load in the Ohio River is so high that the river is sterile. This is obviously not the case as there is a great deal of fish in the river as noted in our recent 316B report submitted to the agency. So having this type of a strict "Benchmark" would essentially state that no storm water would be permitted to enter a great number of receiving streams including the Ohio River so all new discharge permits would have to go through the stringent antidegradation demonstration to discharge into a receiving stream that is clearly not impacted. Based on this possibility, has the agency even determined if there are concerns associated with the "Benchmark" set at 90%. It would be incumbent upon the agency that prior to promulgating such a restrictive rule, that the agency actually review the potential complication as this rule could severely restrict any new business growth and unable to actually issue the current permits especially with the trigger as currently written.

We believe that the cap should be returned to the original cap as written into the Great Lakes Rule.

III. CONCLUSION

We have many significant concerns with the Proposed Rule and that it makes Indiana the strictest state in terms of antidegradation in the region. Of primary importance is triggering mechanism in which antidegradation begins and the associated cumulative cap. Current business in Indiana needs to be able to adapt to the market place and make changes without excessive regulatory interference and delays. If a new permit is required for new or expanded business then this is another regulatory hurdle but one that all states require businesses to go through. While we need to be protective of our state waters, we really don't need to place ourselves and our state at a competitive disadvantage in there trying times.